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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/627,178	07/27/2000	Mathias Hellwig	GR 99 P 2403	1260

7590 10/22/2003

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EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 10/22/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/627,178

Applicant(s)

HELLWIG ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8. 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15, line 2 states "combining messages into message packets". It is unclear if "message packets" are the same or different as "data packets" of claim 9. Claim 15, lines 2-3 also state, "and transmitting the message packets together". It is unclear what is meant by "together". Are the messages being sent together or are the message packets being sent together with something?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 9, 11, 12, and 16-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Harriman et al. (U.S. Patent 5,898,687).

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5. In regard to claim 9, Harriman et al. disclose a method for operating a switching system for data packets, which comprises:
6. providing a switching system having inputs and outputs (figure 1, elements 102 and 104);
7. temporarily storing data packets at an input of the switching system (figure 1, elements 112 and 115 where the shared memory is temporary storage for a switch that receives many inputs); and
8. sending only a message to an output of the switching system when each data packet arrives at the input and placing the message into a queue at the output (figure 1, elements 114, 130, 132, 134, and 136 where the message is the header from the data packet which is then broken down into its components and stored in elements 130, which is an unicast output queue as per col. 4, lines 27-28).
9. In regard to claim 11, Harriman et al. disclose a method as in claim 9, wherein the sending step is performed by sending the message along a given transmission path, and which further comprises transmitting the data packet through the given transmission path but through a separate logical channel (figure 1 where the data path between the inputs and element 112 and the outputs is the transmission path but the logical channel is from the inputs directly to the outputs).

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10. In regard to claim 12, Holden discloses a method as in claim 11, wherein the given transmission path is a physical transmission path (figure 1 where the data path between the inputs and element 112 and the outputs is the physical transmission path).

11. In regard to claim 16, Harriman et al. disclose a method as in claim 9, which further comprises handling transmission of a message with a data flow controller (col. 3-4, lines 67 and 1-2).

12. In regard to claim 17, Harriman et al. disclose a method as in claim 9, which further comprises handling of messages with a data flow controller (col. 3-4, lines 67 and 1-2).

13. In regard to claim 18, Harriman et al. disclose a method as in claim 9, which further comprises producing, if a data packet is transmitted to a plurality of destinations, only a plurality of messages and placing the messages into a respective queue (figure 2, elements 240 where multicast is transmitted to a plurality of destinations as is known in the art).

14. In regard to claim 19, Harriman et al. disclose a method for operating a switching system for data packets, which comprises:

15. providing a switching system having inputs and outputs (figure 1, elements 102 and 104);

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16. temporarily storing data packets at an input of the switching system (figure 1, elements 112 and 115 where the shared memory is temporary storage for a switch that receives many inputs); and

17. sending only a message to an output of the switching system when each data packet arrives at the input and placing the message into a queue at the output (col. 6, lines 46-49 where the message sent to the output of the switching system is the information about the data packet), and, if a data packet is transmitted to a plurality of destinations, only a plurality of messages and placing the messages into a respective queue (figure 1, elements 114, 130, 132, 134, and 136 where the message is the header from the data packet which is then broken down into its components and stored in elements 130, which is an unicast output queue as per col. 4, lines 27-28; figure 2, elements 240 where multicast is transmitted to a plurality of destinations as is known in the art).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harriman et al. in view of Sanders, Jr. et al. (U.S. Patent 4,135,156).

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20. In regard to claim 10, Harriman et al. disclose a method as in claim 9 but lacks wherein the sending step is performed by sending a message containing:

21. a reference; information about a priority for correct marshaling of the data packet; and information about a length of the data packet.

22. However, Sanders, Jr. et al. disclose a message containing a reference (figure 4 where the leading packet delimiter can be a reference);

23. information about a priority for correct marshaling of the data packet (figure 4 where the control information can be used as priority information); and

24. information about a length of the data packet (figure 4 where the packet length indicator contains information about the length of the packet). It would have been obvious to one with ordinary skill in the art at the time of invention to include the reference, priority, and information about length in the method of claim 9. The motivation being that all data packets need a header or information about the packet in order to be transmitted.

25. In regard to claim 13, Harriman et al. disclose a method as in claim 9 but lacks the method further comprising returning a further message to an input memory from an appropriate output as soon as the data packet can be dispatched through the output, and only then transmitting the data packet to an appropriate destination. However, Sanders, Jr. et al. disclose a method further comprising returning a further message to an input memory from an appropriate output as soon as the data packet can be dispatched through the output, and

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only then transmitting the data packet to an appropriate destination (col. 11, lines 30-36 where the output queue manager controls the output queues and the memory refers to the input memory of claim 9). It would have been obvious to one with ordinary skill in the art at the time of invention to include the returning a further message with the method of claim 9. The motivation being to allow the input memory to know when the outputs are ready to receive data and congestion will not be blocked.

26. Claim 14 is rejected for the same reasons as claim 13 even though claim 13 lacks the returning step being performed by returning the further message containing information about the destination of the data packet. However, Sanders, Jr. et al. further discloses the returning step being performed by returning the further message containing information about the destination of the data packet (col. 11, lines 30-36). It would have been obvious to one with ordinary skill in the art at the time of invention to include the destination address in the further message. The motivation being that the destination of the data packet must be known in order to be transmitted successfully.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The

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fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

29. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



JK
October 6, 2003

Joshua Kading
Examiner
Art Unit 2661


**KENNETH VANDERPUYE
PRIMARY EXAMINER**